



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Frederic Mikulec et al. Art Unit : 1773
Serial No. : 09/625,861 Examiner : H. Le
Filed : July 26, 2000
Title : TELLURIUM-CONTAINING NANOCRYSTALLINE MATERIALS

Commissioner for Patents
Washington, D.C. 20231

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TC 1700

AMENDMENT

In response to the action mailed August 22, 2002 ("Office Action"), Applicants submit the following remarks. Please amend the application as follows:

In the claims:

Please amend claims numbered 12-18, and 36-62 as follows:

~~12.~~ (Amended) A population of nanocrystallites comprising a plurality of nanocrystallites, each nanocrystallite including:

a nanocrystalline core comprising MTe, wherein M is selected from the group consisting of Cd, Zn, Mg, and Hg; and

an overcoating of a semiconductor material on a surface of the core,
wherein the plurality of cores is monodisperse.

~~13.~~ (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 20%--
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~~14.~~ (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 40%--
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~~15.~~ (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 60%--
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~~16.~~ (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 70%--
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~~17.~~ (Amended) The population according to claim ~~12~~, wherein the plurality of cores has a size distribution having a standard deviation no greater than 15% of a mean diameter of the population--
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~~18.~~ (Amended) The population according to claim ~~12~~, wherein each core comprises CdTe--
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